The interesting features of this case are the long time between the injury and the operation, and yet no disease of the membranes, and the complete success of the operation.

Case of Gangrenous Erysipelas of Penis and Scrotum. By A. W. KING, M. D.

During the prevalence of epidemic erysipelas in April and May, with the assistance of Dr. Sapp, of Birmingham, Ill., I treated a case of *gangrenous erysipelas* of the genitals in the person of Mr. Newton Donegan, of this place. The disease resulted in sloughing of two-thirds of the skin and cellular tissue covering the penis and the entire scrotal sac, except a small flap about the size of a two-shilling piece, covering the lower portion of the cord and upper portion of epididymis of left side. The case had received no treatment previous to the sixth day of the disease, when the parts became clouded and mottled with the dark patches of gangrene. Three days later the slough came away, leaving the greater portion of the body of the penis and the testicles, cords, &c., entirely exposed.

For a few days we gave the patient tonics and anodynes as seemed to be indicated. The only local applications used were fine linen cloths saturated with mucilage of slippery elm bark—in which the genitals were entirely enveloped—and occasional syringing with infusion of oak bark. In a few days adhesions were noticed between the edges of the surrounding skin and the testicles, then healthy granulations shooting out from the edges, and soon softening and elongation of the skin. These processes continued uninterruptedly for three or four weeks, when the covering was complete, and our patient able to go to work. Almost the whole of the new scrotum is formed by the stretching and elongation of the skin from the inside of the thighs, and from the perineum—scarcely one-fifth of it being new formation.

DOMESTIC SUMMARY.

Pathology and Treatment of Hospital Gangrene. Turpentine as a Local Application.—Several cases of hospital gangrene have been recently received into the West End U. S. General Hospital, Cincinnati, which furnished occasion for some instructive and judicious observations by Dr. Robert Bartholow, Act. Ass. Surg. U. S. A. in charge, on the pathology and treatment of this affection.

Hospital gangrene exists, he observes, in two forms in the army. First a true hospital gangrene, transmissible by contagion from wound to wound; and a second, a pseudo hospital gangrene. In the first form, which is much less frequently observed, the application of a morbific agent, either through the medium of the atmosphere or by actual contact, induces a rapidly destructive inflammation and death of the tissues. It is a peculiarity of this inflammation, that it has no boundaries and spreads with great rapidity through all the tissues, but especially through the connective tissue; the contact of the decomposing sloughs being sufficient to keep up the morbid action. In this form of gangrene the local lesion precedes those grave constitutional complications—"the typhoid state." In the other form the local disease, the sloughing, the pseudo gangrene, appear at a period subsequent to constitutional infection. Soldiers in the field are subjected to various influences, which lower vitality; their blood is impoverished by insufficient diet, fatigue, and exposure to vicissitudes of temperature and to malaria. These influences impair the secondary assimilation, and consequently lower the reparative process in injuries. In a soldier whose vital powers are thus weakened, a gunshot-wound or injury is very apt to assume the sloughing or gangrenous character; and the variety or extent of the local

action will depend upon the degree in which scorbutus and malaria have vitiated the blood.

How shall these two forms of hospital gangrene be discriminated? How are the points, if any, in the different diagnosis? The history of the case, and the character of the local lesion are the only means of determining this interesting question. If the constitutional have preceded the local symptoms, and evidences of the scorbutic taint and malarial cachexy have existed, it may be presumed that we have to deal with the pseudo gangrene. This presumption will be converted into certainty, if there be present no sources of infection and the sloughing presents the characters peculiar to the pseudo gangrene. What are these characters? In the pseudo gangrene the sloughs are never so extensive as in true gangrene, the boundaries between healthy and diseased textures more clearly marked and the inflammatory zone surrounding the sloughing tissues less vivid. In the pseudo gangrene there is less rapid extension of the disease, and rarely those large and sudden detachments of masses of skin and connective tissue; but the gangrene spreads more slowly and equally, the sound structures presenting pretty well defined healthy margins. How shall we treat the varieties of hospital gangrene? It is obviously important to recognize whether it is a local disease followed by secondary constitutional complications, or a constitutional discrasy producing secondary local phenomena. In the first form, or the true hospital gangrene, we may rely on topical applications, escharotics, actual cautery, &c., since the destruction of the local morbid process prevents constitutional or systemic infection and enables the reparative process to assume its normal direction. In the second form or pseudo hospital gangrene, topical medication is of secondary importance; the discrasy must be corrected, the secondary assimilation restored to its healthy state, by vegetable food, animal nutriments, porter, ale, &c., and the local morbid process changed by suitable dressings.

Bromine has acquired its reputation in the cure of hospital gangrene, by its general use in this form. To insure a successful application of the bromine, it is necessary to apply it to the structures not yet invaded by the gangrene, and hence the sloughs must be carefully dissected off. This is a tedious process, and the application of the bromine to the sound tissues is acutely painful. Moreover, bromine itself thus applied, produces a slough which may be, and is not unfrequently, mistaken for an extension of the gangrene, requiring renewed applications of the escharotic. These are strong objections to the use of this agent. There can be no doubt that thus applied it is quite effectual, but not more so than nitric acid, permanganate of potassa, chloride of zinc and other agents of this class. Indeed a reviewer of Dr. Goldsmith's monograph on bromine in hospital gangrene, asserts that, a saturated solution of sugar is equally efficacious if applied in the same way! So great is the trouble and pain attending the removal of the sphacelated tissue from the application of the escharotic, that it is very desirable to secure an agent, which will dissolve out the sloughs and change the action of the tissues. We have such an agent in the OIL OF TURPENTINE. We have seen the application of turpentine in several quite formidable cases of sloughing wounds, followed by the speedy solution of the gangrenous tissue and a change at once quick and decided in the surrounding structures.

Dr. B. related some cases to illustrate these principles, one of which we quote:—

CASE I.—Wm. Ambrosher, private Co. C, 49th Regiment O. V. I., aged 25 years, was wounded on the 27th of May, 1864, near Dallas, Ga., with a musket ball in lumbar region, posteriorly, right over spinal column. Admitted July 1st, 1864. Patient in a scorbutic and very anæmic condition, has bed-sores over nearly every bone, that comes in contact with the bed, as over the crests of ilia and trochanters of femurs. The wound made by the ball is surrounded by considerable inflammation. Three days after admittance, some necrosed bone of the spinous processes of the vertebra, which had been touched by the ball, were removed and two days after this the patient had much fever, parts around the wound became much more inflamed and considerable swelling took place, an abscess formed, the contents of which made their exit through a

fissure, running from the abscess to the posterior surface of left thigh. A large sloughing ulcer of four inches in diameter took the place of the abscess and wound, at the same time sloughing also commenced in the bed-sores.

By order of Dr. Bartholow, poultices of yeast and charcoal were applied to the inflamed surface and to the ulcers, the oil of turpentine twice per day, by means of a piece of lint shaped exactly like the surface of the ulcers, and saturated with turpentine; the borders of ulcers were protected with sweet oil. The turpentine arrested the sloughing, appeared to dissolve the slough and detach it from the healthy tissue. After the fourth application granulations were seen on the whole surface of ulcers, turpentine was then discontinued, and equal parts of alcohol and water substituted as a dressing. The fissure was injected with a solution of permanganate of potassa; this soon healed it; excessive granulation was controlled with a solution of nitrate of silver (40 grs. to ℥i of water); quinine, a good diet and a bottle of porter every day were given. Patient is nearly well now.—*The Cincinnati Lancet and Observer*, Oct. 1864.

Sixty-six Cases of Lithotomy.—Prof. C. A. POPE, publishes (*St. Louis Med. and Surg. Jour.*, Sept. and Oct. 1864) a table of sixty-six cases of lithotomy, with eighty-six calculi removed. His method has been generally the single lateral, which has usually sufficed for the removal of the calculi. In but three instances in the male, he found it necessary to resort to the bilateral method. In females, on the contrary, he resorted to it exclusively, directing the incisions upward and outward. In but one instance, he says, has he been compelled to perform the high or supra-pubic operation. In that patient, a young man 22 years old, the stone had existed from infancy, and was very large. Even this opening did not suffice for the removal of the foreign body, as it was firmly impacted in the bones, filling the whole pelvis. "I was compelled to make the lower section also, and being thus enabled to quarry, as it were, through and through, I succeeded in extracting by piecemeal the whole mass. The fragments saved weighed three ounces, five and a half drachms, with quite as large a quantity of sand, which could not be collected, and was lost. The case was regarded as extremely unfavourable, but an operation affording the only hope of life, it was willingly accepted. The patient sank, on the third day, from the shock of the operation, reaction not having taken place.

"One patient was operated on by the high and low methods at the same time, on account of a very large stone, while but one other required secondary lithotomy. For a year after the first operation, he was entirely free from all symptoms of stone. Three years subsequently I removed from him three other calculi, which, although of the same chemical constitution as the first, have a very different appearance, and are much harder.

"With the exception of the first two cases, in which I used the single lithotome caché of Frère Côme, I have operated altogether with the simple scalpel. It is unquestionably, I think, the simplest and best instrument.

"It has not been my custom to institute any special preparatory treatment of my patients for the operation. When there was any marked fever, or other untoward symptom, I would of course delay for a few days; but in nearly every case, I have seen the patient one day and operated the next. The best and speediest way to give relief is to remove the source of trouble. Prior to the operation, as is usual, I order a dose of castor oil over night, to clear the bowel, and, at the time of its performance, always introduce the finger into the rectum, with the double object of assuring myself of its being empty, and of provoking it to contraction, so as to be as far as possible out of the way of the knife. When the staff is reached in the perineum, the assistant who holds it, hooks it well up under the arch of the pubes, in order to afford more space for the operator between it and the posterior wall of the urethra, and to draw the parts away from the rectum.

"In no case have I had serious hemorrhage attending the operation, and never applied a ligature but in one instance. In one patient there was a troublesome secondary hemorrhage on the ninth day, in consequence of the extraction of a very large stone, causing ulceration of the wound, which extended into the rectum, the bleeding being from the bowel.